

REPORT: FE-23-97

RAILROAD: St. Lawrence & Hudson Railway (A subsidiary of Canadian Pacific and formerly known as the Delaware and Hudson)

LOCATION: Binghamton, New York

DATE, TIME: July 24, 1997, 3:50 a.m., EST

PROBABLE CAUSE:

The Carman did not provide Blue Signal protection while working on railroad equipment to protect himself from the unexpected movement.

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| EMPLOYEE: | Craft..... | Maintenance of Equipment |
| | Activity..... | Car inspections; air brake tests; applying EOT device; and switching at the same time. |
| | Occupation..... | Carman |
| | Age..... | 53 Years |
| | Length of Service..... | 29 years, seven months |
| | Last Rules Training..... | March 1996 |
| | Last Safety Training..... | January 1997 |

Circumstances Prior to the Accident

On Weds., July 23, 1997, a St. Lawrence & Hudson Car Inspector (Carman) reported for his regularly assigned duties working the 10 p.m. to 8 a.m. shift (10-hour shift) at the railroad's East Binghamton Yard in Binghamton. The yard's 17 tracks were geographically aligned east/west and were south of the railroad's two freight main lines which were designated from north to south as No. 2 Runner and No. 1 Runner, respectively. The railroad's timetable direction was north/south with timetable north being the west end of the yard and timetable south being the east end of the yard.

At approximately 3:15 a.m. on July 24, the Carman and a Co-Worker were informed by the on-duty Yardmaster that two tracks were ready to be used. Outbound Train 268 was waiting for an air brake test on Track No. 4, and 46 cars for outbound Train 270 were ready to be inspected on Track No. 5. After obtaining an additional end-of-train (EOT) device from the shop and placing it into the Carman's company vehicle (known as a "mule"), the two Carman proceeded to opposite ends of the yard. The Carman locked and flagged the east end of Track No. 5 while his

Co-Worker did the same on the west end. After connecting the ground air to the end of the west car, the Co-Worker began walking eastward, inspecting the south side of the cars on Track No. 5 (Train 270) while the Carman performed the brake test on Train 268 on Track No. 4. After completing the brake test, the Carman was to join his Co-Worker and help finish inspecting the cars on Track No. 5.

At 3:35 a.m., the Co-Worker overheard the Carman's radio transmission informing the Crew Members of Train 268 that the brake test was complete and that they were "OK to depart." He noted the time in his notebook. As Train 268 began pulling westward, its departure was temporarily interrupted by a cut of cars fouling the yard's Track No. 1 switch. Continuing his inspection of Track No. 5, the Co-Worker reached the easternmost car and noticed the Carman's vehicle parked next to the No. 1 Runner.

On July 23, 1997, the Crew for East Binghamton Yard Switcher Job YBHS-66 (also known as 6R), reported for duty at 11:59 p.m. The 3-person Crew consisted of a Locomotive Engineer, Conductor, and Brakeman. At approximately 3 a.m. on July 24, the Crew received instructions to make up Train 269 on the No. 1 Runner. After performing several switching moves, during which they classified cars according to the switch list provided by the Yardmaster, the Crew Members pulled 19 cars westward out of Yard Track No. 1, leaving 14 cars in the track and fouling the switch. They then shoved the cars eastward onto the No. 1 Runner and coupled to four cars they had previously left on the west end of the track. After coupling to the standing four cars, they shoved the entire cut of 23 cars eastward to spot them at the ground air plant. After stopping, the Brakeman instructed the Engineer to pull ahead (westward), believing that the head five were to go back to Yard Track No. 1. After pulling ahead, the Conductor radioed the Brakeman, informing him that all the cars were to remain on the No. 1 Runner. The Brakeman stopped the movement and instructed the Engineer to shove back (eastward) to the original position at the ground air plant. This completed the make up of Train 269, except for the outbound power, which was still at the engine house. The Crew uncoupled the locomotives and returned to Yard Track No. 1 where they shoved the cars they had left fouling the switch into the clear, allowing Train 268 to depart the yard off Track No. 4.

The Accident

There were no eyewitnesses to the accident. It is believed that the Carman attempted to apply the EOT device to the rear of the east end car (TTAX 554144) on the No. 1 Runner prior to the completion of the switching moves being made by YBHS-66. At some point during a shoving move eastward, the Carman was evidently knocked to the ground and rolled over by the wheels of the moving equipment.

After noticing the Carman's vehicle, the Co-Worker proceeded to the No. 1 Runner and discovered the fatally injured Carman beneath the wheels of the fifth car from the east end of the train. He contacted the Yardmaster by radio. The Yardmaster then called emergency responders at approximately 4:17 a.m. Emergency responders included the local sheriff's department, fire department, and EMS technicians. The local Coroner pronounced the victim dead at the scene.

and established the time of death as 3:50 a.m. The Coroner then ordered the body transported to a local hospital for autopsy.

(Please see the attached diagram of Binghamton Yard to better visualize the accident scene and chain of events that led up to the fatality.)

Post-Accident Investigation

Post-accident interviews were conducted with individuals having direct knowledge of the accident. The involved equipment was inspected for compliance with applicable safety regulations with no conditions noted which would cause or contribute to the cause of the accident. The EOT device was found positioned on the coupler of the east end car of the train without the air hose connected. The investigation disclosed that no Blue Signals were displayed at either end of the cars on the No. 1 Runner. Documentation indicated that the Carman had received training in the proper application of Blue Signal protection in March 1995 and March 1996; however, he had been disciplined in the past for not applying the Blue Flag rule. The Carman's portable radio and flashlight were found in the vehicle and were working as intended. The YBHS-66 Crew was unaware of the presence of the Carman working on the No. 1 Runner. Results of mandatory post-accident toxicology testing of the Carman's remains were negative. Cause of death as determined by autopsy was, "Compression injury of lower thorax with multiple internal injuries."

DETAILS:

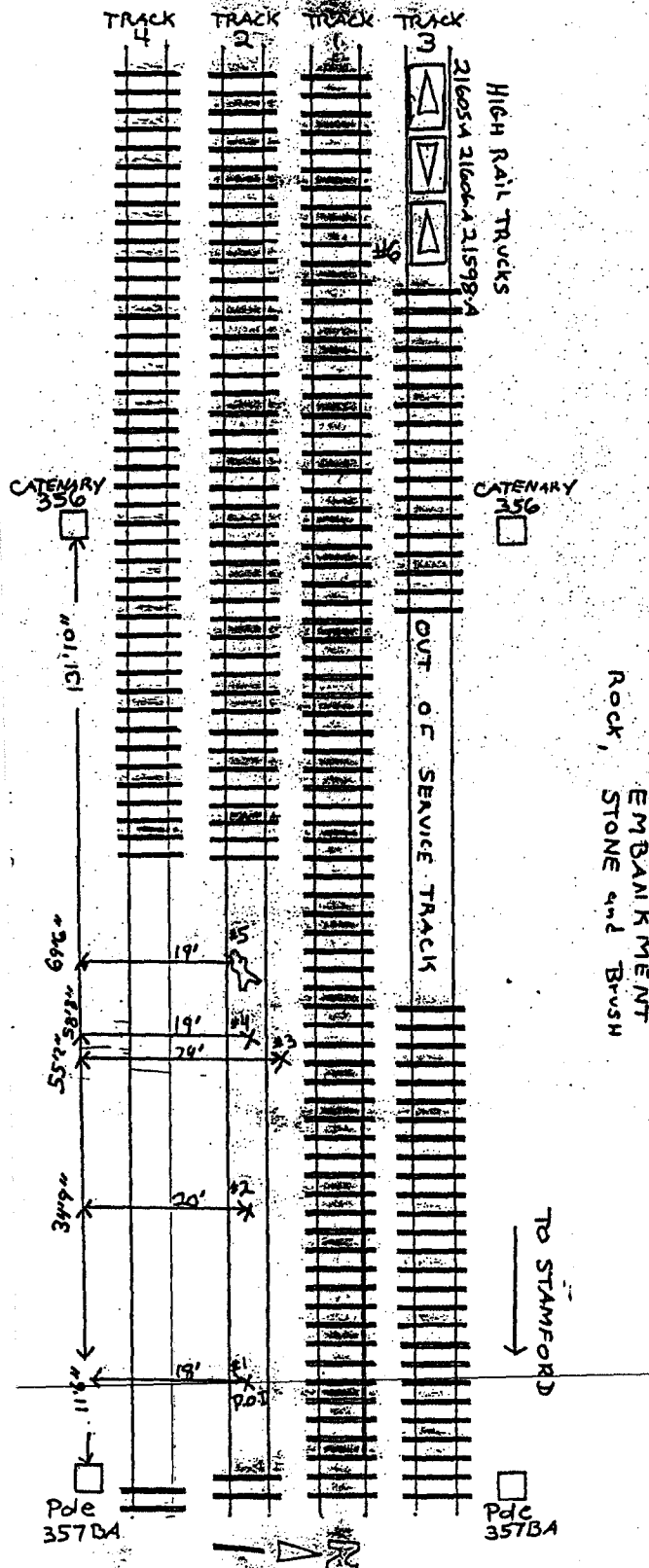
DAIGRAM KEY

- #1- Point of Impact. Approx. 11'6" WEST of Pole 357BA and approx. approx. 18 feet North of the track #4 SOUTH TIE end. Within the gauge of track #2.
- #2- Radio battery pack within the gauge of track #2 and approx. 34'9" WEST of Pole 357BA and approx 20' NORTH of the track #4 SOUTH TIE end.
- #3- Victims RIGHT arm between the track #1 and #2, approx. 55'2" WEST of Pole 357BA, and approx. 24' NORTH of the track #4 SOUTH TIE end.
- #4- Upper portion of a RRPCO radio approx. 58'8" WEST of Pole 357BA and approx 19 feet North of the Track #4 SOUTH TIE end, and within the gauge of track #2
- #5- Body of the victim within the Gauge of track #2, and approx. 69'6" from Pole 357BA and approx. 19' NORTH of the TRACK #4 SOUTH TIE end.
- #6- A RED baseball style cap located between track #1 and 3 approx 200 feet WEST of the point of impact.

A cross-over is present between tracks #2 and #1 in this area and has been deleted from this diagram.

Two additional highrail trucks are parked on track #3 to the EAST of 357BA and are not visable in this diagram.

ALL MEASUREMENTS ARE APPROX. AND THIS DIAGRAM IS NOT DRAWN TO SCALE.



REPORT FOLLOW-UP PREPARED BY:
t. Thomas W. Bennett

SHIELD NO.
201

ID NO.
108296

SIGNATURE
[Signature]

REFERRED TO (UNIT)

ISSUING SUPERVISOR

[Signature] Capt. S. McCABE

SHIELD NO.
4

ID NO.
010663

SIGNATURE
[Signature]

C.O.'s INITIALS

LTSM

ORIGINAL